

An Enterprise Computing Environment

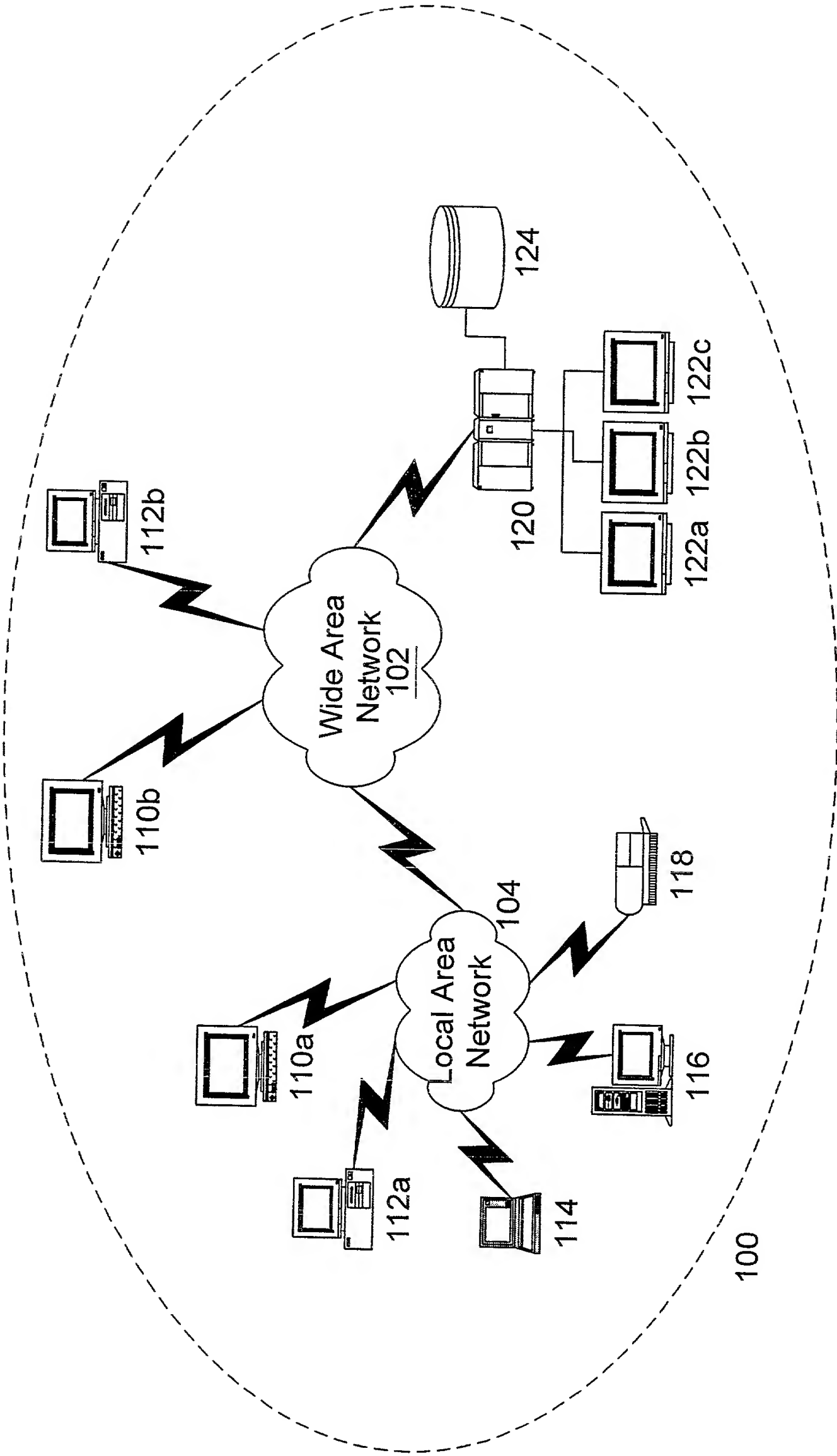
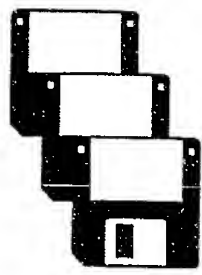
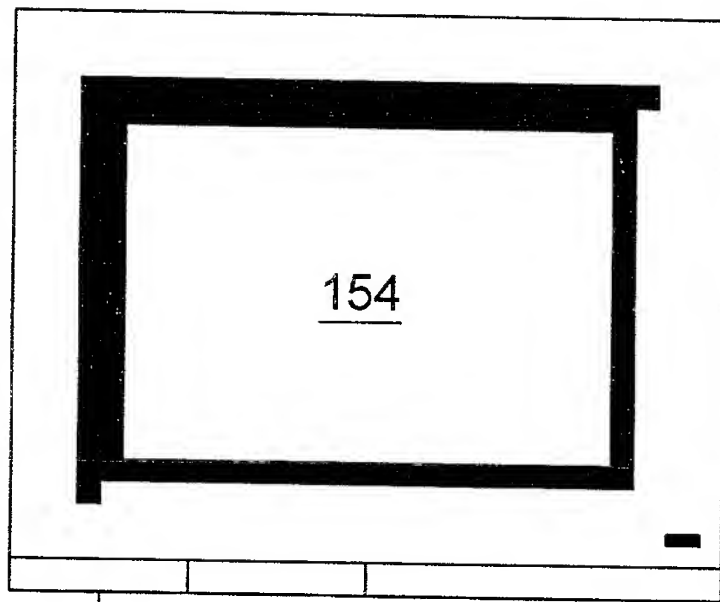


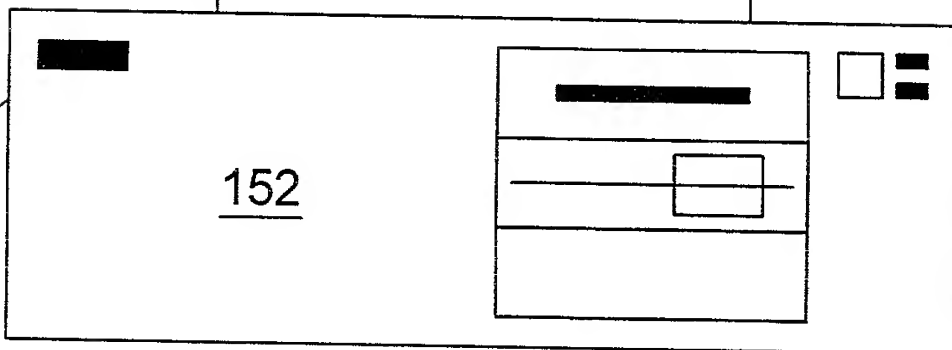
FIG. 1



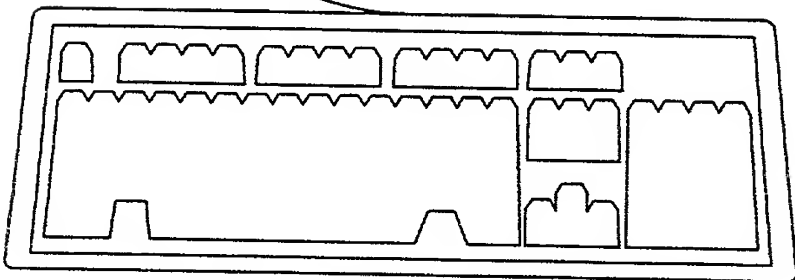
160



154



152



156



158

150

FIG. 2

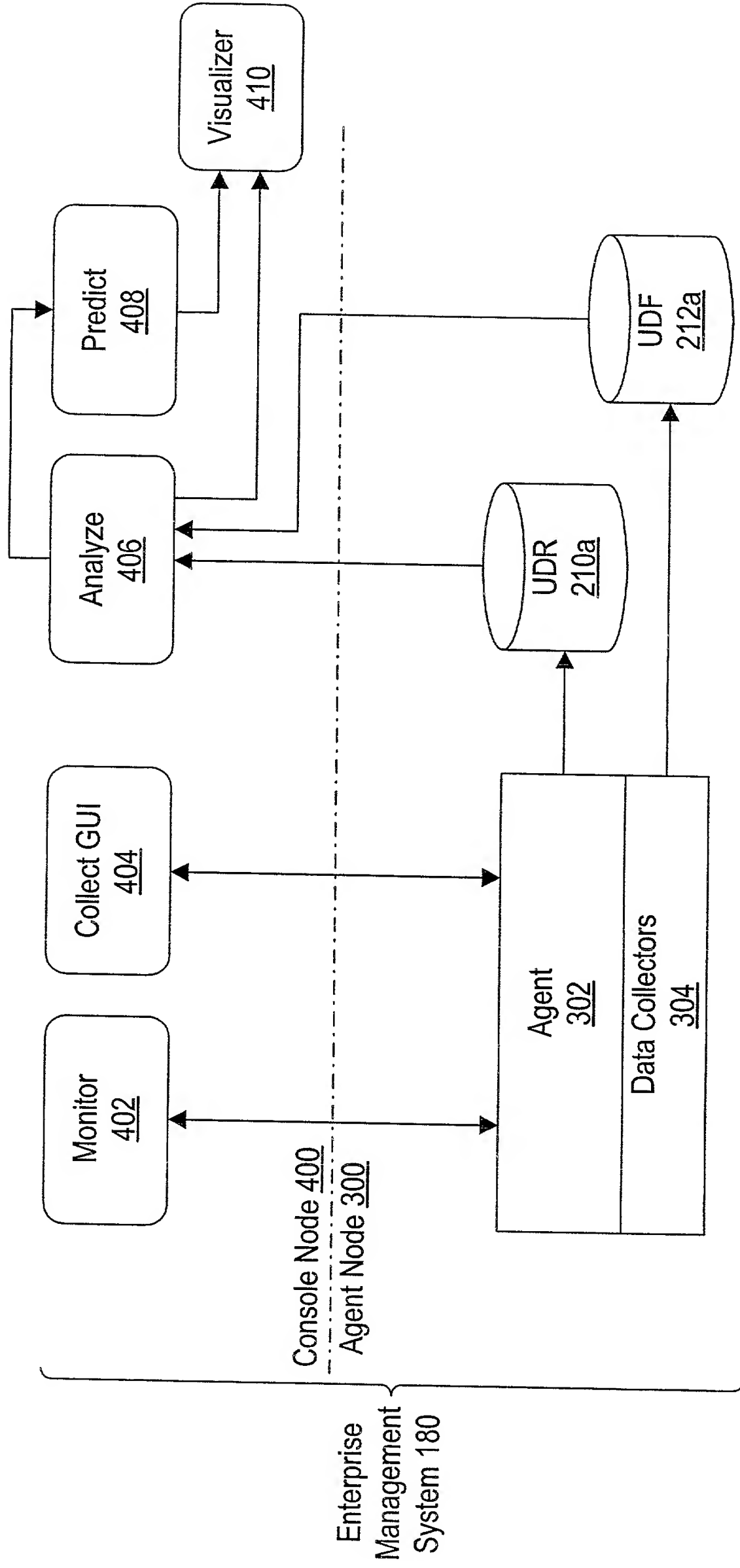


FIG. 3

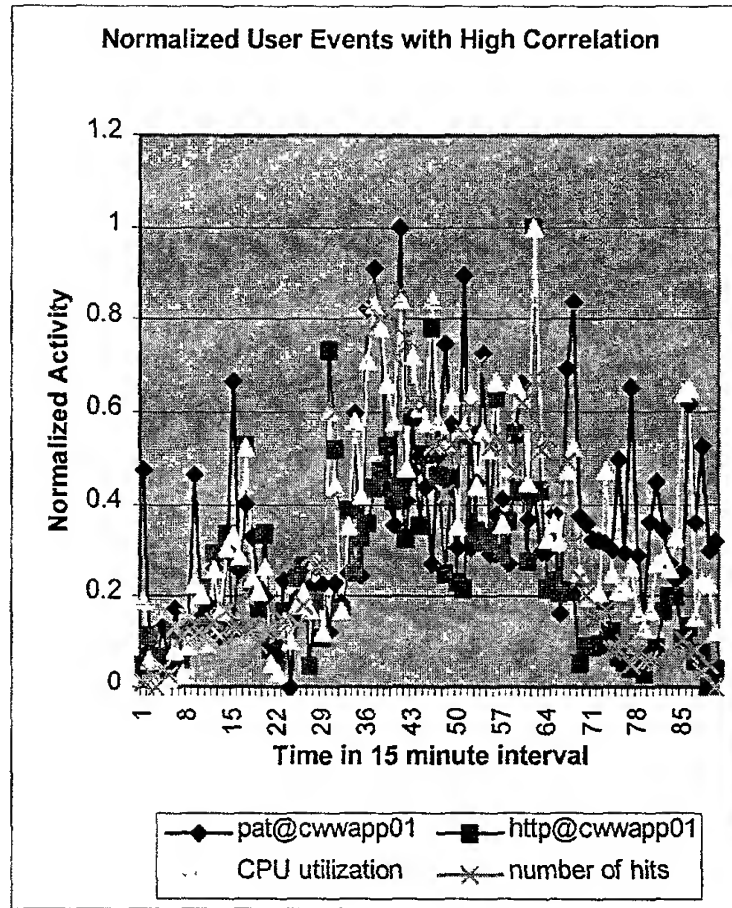


FIG. 4

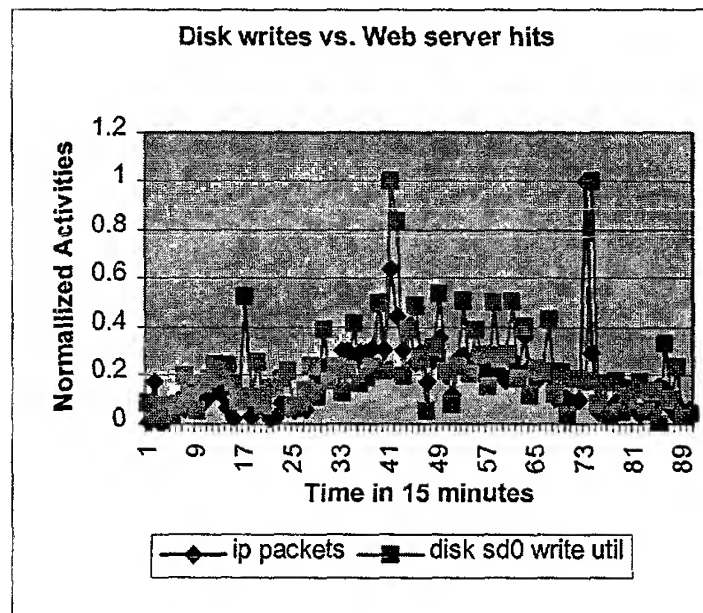


FIG. 5

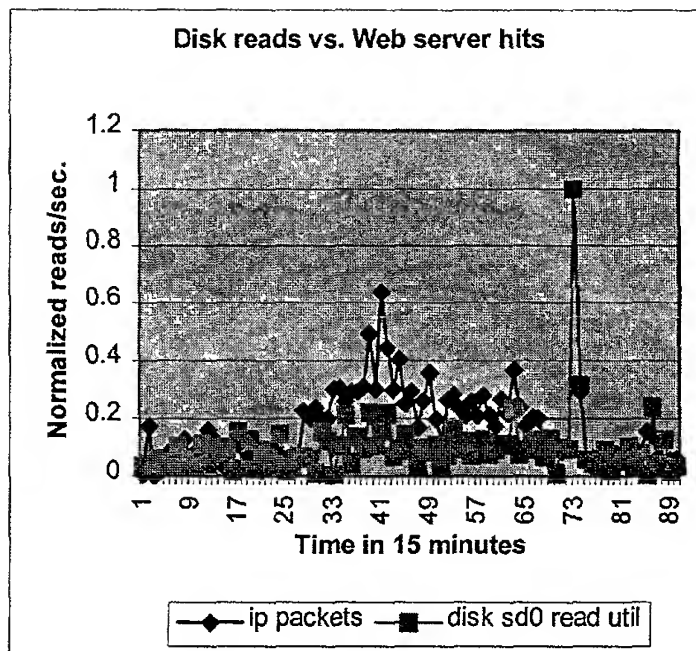


FIG. 6

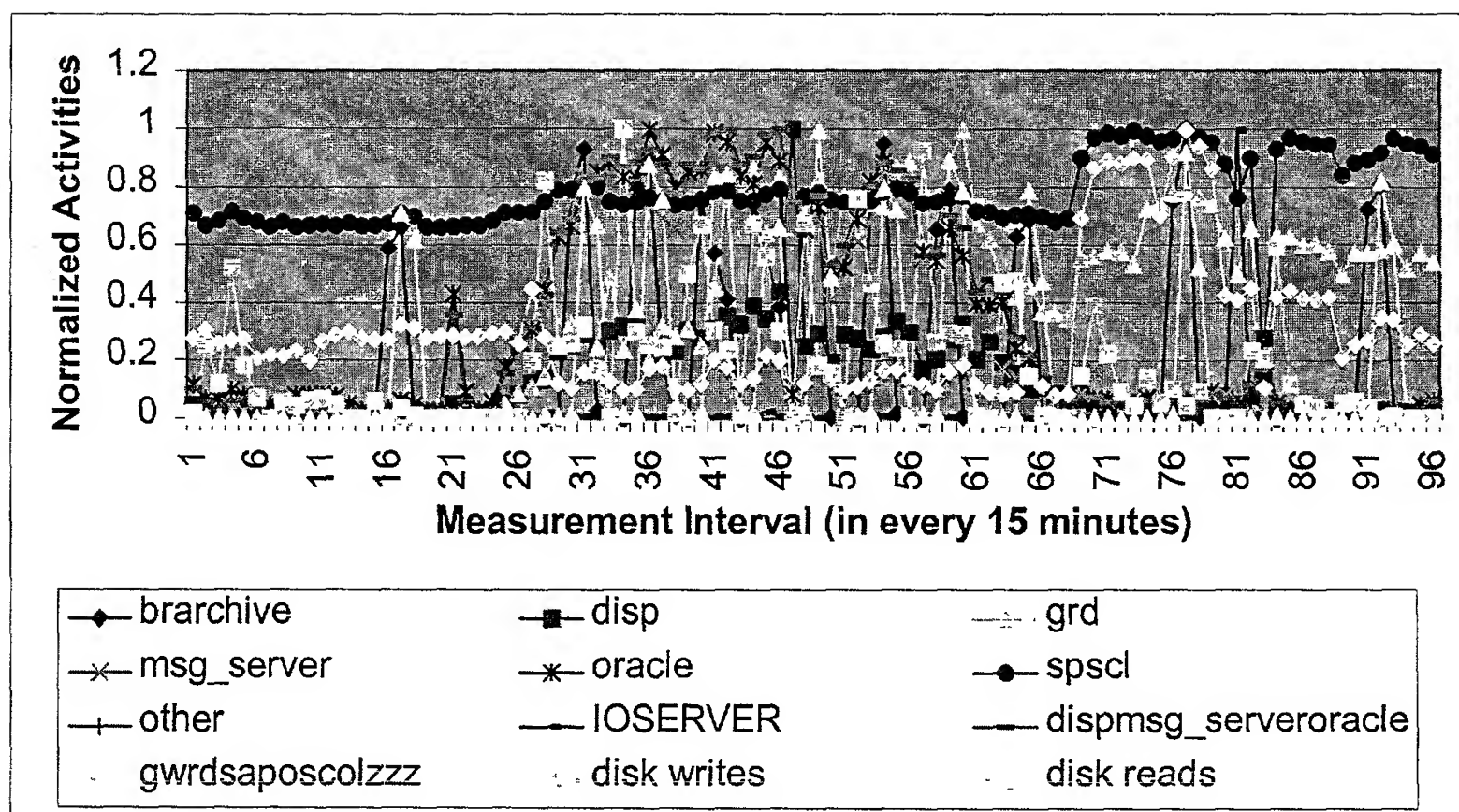


FIG. 7

0587	0784	0490	0858	<b>0732</b>	1661	1467
1854	1472	1508	1420	1775	1492	2006
1643	1630	2294	1697	1329	1592	1606
1528	1782	3282	1700	2093	3025	2835
2861	4148	5844	7412	9399	9051	8001
7350	8993	7633	7783	6869	8159	7247
5992	6084	5983	5195	5206	4267	5207
4889	5400	5914	6730	7172	5163	5326
5165	5742	4671	6015	5527	6471	5100
5323	4567	4127	4886	3315	2605	2295
1775	1824	1997	1206	1227	1333	0922
1154	1004	1020	0990	0903	1166	0911
1411	1126	1221	0784	0928	0495	

FIG. 8 (TABLE 1)

35.95	33.72	32.92	32.72	<b>33.03</b>	34.10
33.19	34.23	36.52	36.18	34.34	37.09
35.57	37.89	38.34	37.59	41.55	36.72
36.30	37.16	33.59	33.24	35.19	34.45
35.77	36.20	35.59	37.43	34.73	42.92
40.19	35.55	38.69	42.54	39.83	44.75
46.81	45.95	43.91	42.49	47.02	40.79
44.89	43.02	42.48	47.00	42.53	41.77
43.47	38.70	42.25	43.51	40.19	42.15
41.49	43.99	38.76	40.83	43.89	43.39
40.30	49.65	41.55	38.21	38.78	38.12
40.75	41.60	36.95	36.09	36.19	36.23
40.75	36.90	36.33	36.41	37.15	35.46
34.89	35.53	37.29	37.55	37.07	38.28
43.59	43.76	35.31	36.60	36.56	34.78

FIG. 9 (TABLE 2)

22.38	23.28	22.65	22.23	<b>22.35</b>	23.45
22.57	23.37	23.49	24.69	23.56	25.76
23.83	26.33	23.49	25.55	29.02	24.68
24.10	26.36	22.86	22.51	24.03	23.72
24.99	25.40	22.36	24.35	23.20	31.82
28.89	24.02	27.07	25.16	26.27	26.67
27.75	28.24	28.98	27.35	27.77	26.22
29.86	26.59	28.74	32.52	28.09	25.13
28.03	24.90	24.71	29.30	26.43	26.11
26.27	30.43	25.77	26.75	29.34	27.64
25.53	35.54	27.67	24.71	24.92	24.58
24.62	24.64	22.43	22.97	22.93	23.01
24.35	23.41	22.63	22.45	22.27	22.30
22.10	22.71	22.89	24.02	24.46	24.47
23.17	23.54	22.51	22.78	21.72	22.28

FIG. 10 (TABLE 3)

1004423-1004

10.12	06.68	06.35	07.13	<b>06.52</b>	07.49
06.57	07.01	10.03	07.37	07.58	08.26
06.95	08.60	11.78	08.20	09.48	08.85
07.87	07.70	06.83	06.76	08.02	05.98
07.67	07.40	07.87	08.28	07.95	07.02
07.96	07.59	08.16	11.21	08.11	13.18
13.93	13.10	09.77	09.08	14.72	09.55
10.07	10.40	09.81	08.33	10.42	12.50
10.98	08.65	13.80	08.65	09.88	12.33
08.54	09.28	09.57	08.34	10.89	11.74
09.19	09.65	08.57	08.58	09.30	07.38
12.03	13.29	09.25	09.10	08.81	08.79
08.73	08.61	10.32	08.55	11.68	08.50
07.31	09.12	09.90	08.98	08.33	08.03
08.17	11.37	09.12	10.58	08.60	08.78

FIG. 11 (TABLE 4)

08.94	08.16	08.79	08.60	<b>08.27</b>	08.90
10.48	09.29	08.52	10.03	10.31	11.08
10.41	11.06	10.10	09.06	14.90	09.29
11.21	08.88	09.76	09.81	10.29	10.76
08.79	08.81	09.62	10.99	09.31	13.08
10.18	10.97	09.54	10.77	13.45	10.03
10.38	10.96	14.53	10.76	21.37	19.17
10.46	13.09	14.39	11.40	08.55	12.06
15.06	10.69	08.88	11.00	14.66	10.62
13.07	11.68	09.85	14.60	11.47	11.68
14.65	10.28	13.26	09.43	10.89	10.68
13.66	09.47	10.70	8.32	10.30	10.32
10.15	21.36	08.95	10.06	08.28	10.20
08.43	09.19	09.76	10.13	08.48	09.61
07.78	12.27	09.13	10.95	08.22	08.35

FIG. 12 (TABLE 5)

2.58	2.67	2.84	2.70	<b>2.55</b>	2.51	3.24
2.75	2.57	2.52	3.30	2.64	2.94	3.20
3.07	2.42	3.69	2.49	3.43	2.44	3.11
2.85	2.63	3.61	2.41	2.56	2.87	2.89
2.84	2.34	3.70	3.41	2.29	3.22	4.26
2.62	3.54	3.16	4.33	3.25	3.74	4.29
2.90	3.15	3.61	3.11	2.59	3.18	3.01
3.28	2.51	2.93	3.77	3.12	3.40	2.92
3.11	3.43	2.97	3.12	3.32	3.29	4.47
2.96	3.12	3.35	3.46	2.89	3.49	2.35
3.18	3.13	11.69	5.21	2.78	2.67	2.60
3.09	2.45	2.85	2.77	3.22	2.57	3.01
2.24	4.50	2.61	3.44	2.41	2.58	

FIG. 13 (TABLE 6)

058.28	094.48	057.21	061.07	<b>070.17</b>
077.36	070.51	085.28	070.03	075.43
080.20	091.58	084.08	072.06	062.96
080.71	081.44	064.20	072.48	071.84
062.35	063.32	076.46	071.22	069.78
072.89	070.42	105.76	100.35	108.08
099.28	099.84	122.39	122.40	112.88
120.79	121.09	124.37	163.68	122.83
195.36	153.18	122.26	144.53	111.34
121.02	094.37	113.77	133.77	099.88
083.11	114.19	118.35	107.72	102.33
113.04	102.61	118.14	102.93	094.75
114.72	104.32	136.06	108.71	095.40
101.48	100.88	080.25	077.42	080.48
075.82	078.86	272.79	120.52	067.90
071.09	066.24	075.90	071.57	074.22
071.17	066.37	070.62	075.28	090.91
088.36	071.25	065.00	069.83	070.14

FIG. 14 (TABLE 7)

TABLE 6



disp	grd	msg_server	brarchive	oracle	spscl	Other	IOSERVER	disp/msg_server/oracle	grd/spscl/other	disk writes/ sec	disk reads/sec
63.76	0.09	0.09	0	190.21	2.87	129.93	0.55	254.06	132.89	1.12	0.01
44.04	0.09	0.11	0	128.46	2.74	144.59	0.43	172.61	147.42	13.49	0.16
7.77	0.09	0.17	0	128.98	2.79	122.98	1.75	136.92	125.86	6.53	0.07
11.82	0.1	0.17	0	168.49	2.89	127.6	0.56	180.48	130.59	27.61	0.27
48.53	0.07	0.17	0	141.78	2.81	129.88	0.49	190.48	132.76	9.73	0.16
8.83	0.07	0.11	0	87.85	2.78	100.24	0.39	96.79	103.09	3.94	0.09
9.65	0.09	0.13	0	101.65	2.72	104.63	0.55	111.43	107.44	0.19	0
12.98	0.08	0.13	0	110.31	2.77	102.95	0.55	123.42	105.8	3.16	0.08
47.59	0.07	0.07	0	145	2.72	111.32	0.48	192.66	114.11	2.44	0.04
52.83	0.08	0.09	0	147.76	2.74	96.18	0.45	200.68	99	3.54	0.08
58.58	0.08	0.1	0	145.48	2.75	126.09	0.44	204.16	128.92	3.79	0.08
54.36	0.08	0.1	0	140.36	2.73	135.66	0.5	194.82	138.47	2.72	0.06
26.33	0.09	0.16	0	104.34	2.76	140.55	0.48	130.83	143.4	0.2	0
8.7	0.08	0.1	0	75.2	2.73	130.12	0.44	84	132.93	0.21	0
10	0.09	0.13	0	84.3	2.74	129.19	0.53	94.43	132.02	3.51	0.08
11.14	0.09	0.09	2.85	84.28	2.75	129.68	0.53	95.51	132.52	0.21	0.02
<b>19.7</b>	<b>0.11</b>	<b>0.2</b>	<b>3.2</b>	<b>117.56</b>	<b>2.87</b>	<b>151.48</b>	<b>0.45</b>	<b>137.46</b>	<b>154.46</b>	<b>2.1</b>	<b>27</b>
35.04	0.07	0.13	0.03	96.25	2.84	146.31	0.44	131.42	149.22	0.73	23.6
12.29	0.07	0.06	0	76.65	2.72	131.38	0.52	89	134.17	0.22	0
13.55	0.09	0.04	0	65.19	2.71	134.13	0.5	78.78	136.93	0.16	0
...	...	...	...	...	...	...	...	...	...	...	...

FIG. 15 (TABLE 8)

Correlation Coefficient	Wkl 1	Wkl 2
0.965761	oracle	msg server
0.728880	msg server	disp
0.703575	oracle	disp
0.590550	other	spscl
0.540102	spscl	grd
0.451430	msg server	grd
0.440811	msg server	brarchive
0.425671	oracle	brarchive
0.338354	oracle	grd
0.321722	grd	disp
0.271860	disp	brarchive
0.267692	grd	brarchive
0.192810	other	grd
0.094741	spscl	brarchive
0.060713	IOSERVER	other
0.041600	IOSERVER	grd
0.009877	spscl	msg server
0.006852	IOSERVER	spscl
-0.048174	spscl	oracle
-0.052433	IOSERVER	brarchive
-0.061215	IOSERVER	disp
-0.064147	IOSERVER	msg server
-0.076248	IOSERVER	oracle
-0.103297	other	brarchive
-0.405015	other	msg server
-0.429538	spscl	disp
-0.468848	other	disp
-0.474270	other	oracle

FIG. 16 (TABLE 9)

Workload	Reads	Writes
{brarchive}	0.532	0.254
{msg_server,oracle,disp}	0.402	0.508
{grd,spscl,other}	-0.057	-0.204
{IOSERVER}	-0.056	-0.072

FIG. 17 (TABLE 10)

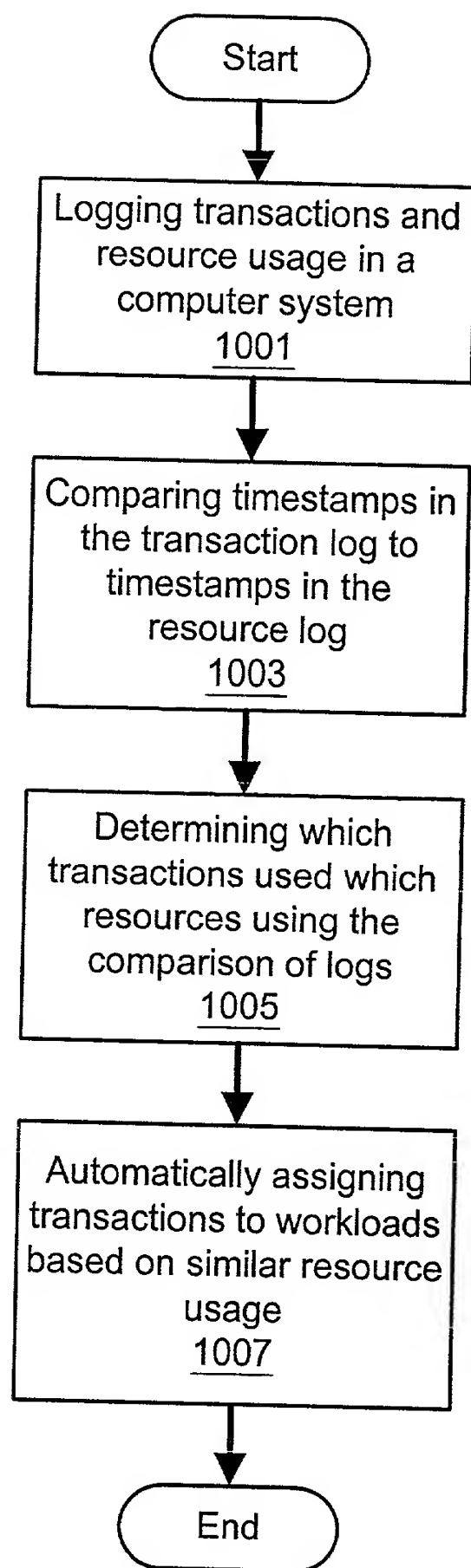


FIG. 18